

PATENT APPLN. NO. 10/551,031  
RESPONSE UNDER 37 C.F.R. §1.111

PATENT  
NON-FINAL

REMARKS

Claims 2, 7, 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. To overcome the rejection, claims 2 and 12 have been amended to delete all occurrences of the term "type"; claim 7 has been amended to recite a dependency on claim 6; and claim 10 has been amended to delete the term "constant". Applicants note that the inorganic filler of the dielectric composition of the present invention as recited in claims 2 and 12 as amended includes compounds known or classified or otherwise considered to be included in the generic terms "a barium titanate", "a strontium titanate", etc. as described in the specification on pages 19 and 20.

Removal of the 35 U.S.C. 112, second, paragraph rejections of the claims is believed to be in order and is respectfully requested.

Claims 11, 13 to 15 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumura et al., JP 2001-294445 ("Matsumura").

Claim 11 recites a dielectric composition containing an inorganic filler and a resin, which is produced by removing solvents from a paste composition. The dielectric composition of the present invention is not a sintered product, so it is not

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necessary to completely decompose or remove the resin, and it is preferable to heat the composition within the heat-resistant temperature of electronic parts, for example, a temperature of 500°C or lower (see page 25, line 4-15, of the specification of the present application).

On the other hand, Matsumura teaches a paste comprising an inorganic filler/powder and a resin. The paste is heated, for example, at about 850°C (page 7, paragraph [0032]) after being coated on a substrate (page 6, paragraph [0024]). In the heating process, organic components are decomposed and vaporized and inorganic fillers/powders in the paste are sintered, i.e. inorganic fillers/powders are combined with each other (page 6, paragraph [0024]; the word "calcinated" is a machine mistranslation). Thus, binder resins are not present and the size of inorganic fillers/powders is changed in the baked film.

In view of the above differences, Matsumura fails to disclose a composition including each of the limitations of the dielectric composition of claim 11. Therefore, the 35 U.S.C. § 102(b) rejection of claims 11, 13 to 15 and 19 as being anticipated by Matsumura is improper and should be removed.

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Claims 11 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al., U.S. Patent Application Publication No. 2001/0055699 ("Kato").

Kato discloses a magnetic recording medium having a nonmagnetic lower layer and a magnetic layer. A ferromagnetic powder having a 0.1  $\mu\text{m}$  average axis length is contained in the magnetic layer. Nonmagnetic powders having a particle size of 0.005-0.5  $\mu\text{m}$  are contained in the nonmagnetic layer. Thus, the different powders are not contained in the same layer.

In view of the above differences, Kato fails to disclose a composition including each of the limitations of the dielectric composition of claim 11. Therefore, the 35 U.S.C. § 102(b) rejection of claims 11 and 16 as being anticipated by Kato is also improper and should be removed.

Claims 1, 2, 5 to 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumura as evidenced by Fang, U.S. Patent Application Publication No. 2003/0138731.

The Office cites Matsumura as disclosing a paste comprising an inorganic filler/powder, a resin, and a solvent that is  $\gamma$ -butyrolactone. The Office notes that Matsumura does not disclose the amount of solvent. The position of the Office is that the modifying the amount of solvent in Matsumura to have the amount

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recited in the rejected claims is a matter of routine optimization. In the rejection, Fang is cited only as disclosing the boiling point of  $\gamma$ -butyrolactone.

Applicants note that the amount of solvent is an important feature of the paste composition of the present invention as recited in claim 1. As described in page 8, lines 11-17, of the specification of the present application: "[w]hen the content of the solvent is 25 wt% or less, generating of voids during drying due to removing solvent is suppressed, and the relative dielectric constant of the dielectric composition can be made high. Furthermore, since the amount of voids which can cause moisture uptake is small, a change of material properties under the effect of moisture and water can be decreased." (emphasis applicants'). The effect of solvent on the characteristics and properties of the paste composition are neither disclosed nor suggested in Matsumura. Therefore, there is no suggestion in Matsumura to experiment with the amount of solvent. Since experimentation must come from within the teachings of the prior art (see *In re Fay*, [52 CCPA 1483] 52 CCPA 1483, [347 F.2d 597] 347 F.2d 597, 146 USPQ 47 (CCPA 1965)), Matsumura cannot support the 35 U.S.C. § 103(a) rejection.

Removal of the 35 U.S.C. § 103(a) rejection of claims 1, 2, 5 to 7 and 17 over Matsumura in view of Fang is in order.

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Claims 1, 2, 4 and 6 to 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato as evidenced by the Material Safety Data Sheet ("MSDS") and Matsumura.

The Office identifies Kato as teaching a composition comprising an inorganic filler/ferromagnetic powder in a resin/binder and a solvent that is butyl stearate. The Office notes that the amount of solvent is not disclosed. The position of the Office is that modifying the amount of solvent in Kato to have the amount claimed in the present application also amounts to routine optimization. In the rejection, the MSDS is cited only as disclosing the boiling point of butyl stearate. Matsumura is not explained in the reasons for rejection.

As described above, Kato fails to disclose a paste containing both ferromagnetic powder and nonmagnetic powders. Thus, the modification of Kato proposed by the Office will not result in the paste composition recited in claim 1 of the present application.

Removal of the 35 U.S.C. § 103(a) rejection of claims 1, 2, 4 and 6 to 9 over Kato as evidenced by the Material Safety Data Sheet ("MSDS") and Matsumura is also in order.

Claims 10, 12, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over various combinations of Matsumura, Kato and Ingman et al., U.S. Patent Application Publication No. 2003/0026584 ("Ingman"). The propriety of these rejections depends

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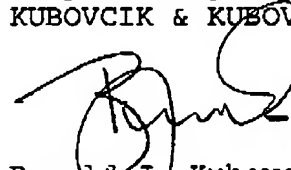
on the rejections of claims 1 and 11, from which claims 10, 12, 18 and 20 depend, either directly or indirectly. Since the rejections of claims 1 and 11 have been overcome, claims 10, 12, 18 and 20 are prima facie patentable.

Removal of the 35 U.S.C. 103(a) rejections and a notice of allowability of the claims of the present application are respectfully requested.

The foregoing is believed to be a complete and proper response to the Office Action dated February 22, 2008.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension and any additional fees that may be required may be charged to Deposit Account No. 111833.

Respectfully submitted,  
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